

What is claimed is;

1. An air-conditioning system for vehicles comprising:

5 a blower / evaporator housing case housing and setting a blower rotated by a motor and creating an air flow and an evaporator connected to a coolant piping through which coolant flows in/out side-by-side along the horizontal direction, wherein:

said blower / evaporator housing case is constituted of two recessed members, which are an upper recessed member and a lower recessed 10 member, separated by a parting line extending along the horizontal direction;

an intake unit for selecting the source of air to be taken in is connected to an intake port of said blower at said blower / evaporator housing case; and

15 an air-conditioning unit having a heater core for implementing outlet temperature control and outlet mode control is connected at a cool air outlet port formed toward the downstream side of said evaporator at said blower / evaporator housing case.

2. An air-conditioning system for vehicles according to claim 1, wherein:

20 said blower / evaporator housing case includes a scroll unit in which said blower is housed ranging on one side from the middle of said blower / evaporator housing case and an evaporator housing unit in which said evaporator is housed ranging on another side from the middle of said blower / evaporator housing case.

3. An air-conditioning system for vehicles according to claim 1,
wherein:

an opening at which a fan of said blower is inserted and a drain hole
constituting a means for draining condensed water are formed at said lower
5 recessed member of said blower / evaporator housing case.

4. An air-conditioning system for vehicles according to claim 1,
wherein:

said intake port and said cool air outlet port are formed at said upper
10 recessed member of said blower / evaporator housing case.

5. An air-conditioning system for vehicles according to claim 1,
wherein:

edges of said upper recessed member and said lower recessed member
15 constituting said blower / evaporator housing case include joint portions,
and a means for locking which locks an expansion valve is formed on said
joint portions.

6. An air-conditioning system for vehicles according to claim 5,
20 wherein:

said means for locking is constituted of semicircular notches for
clamping said coolant piping and guard members for covering said
expansion valve.

25 7. An air-conditioning system for vehicles according to claim 6,

wherein:

5 said guard members provided at said upper recessed member and said lower recessed member include projecting pieces formed to support from behind a screw hole metal plate for mounting said expansion valve at said coolant piping with screws, respectively.

8. An air-conditioning system for vehicles according to claim 1, wherein:

10 said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.

9. An air-conditioning system for vehicles according to claim 2, wherein:

15 said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.

10. An air-conditioning system for vehicles according to claim 2, 20 wherein:

edges of said upper recessed member and said lower recessed member constituting said blower / evaporator housing case include joint portions, and a means for locking which locks an expansion valve is formed on said joint portions.

11. An air-conditioning system for vehicles according to claim 10,
wherein:

5 said means for locking is constituted of semicircular notches for
clamping said coolant piping and guard members for covering said
expansion valve.

12. An air-conditioning system for vehicles according to claim 11,
wherein:

10 said guard members provided at said upper recessed member and said
lower recessed member include projecting pieces formed to support from
behind a screw hole metal plate for mounting said expansion valve at said
coolant piping with screws, respectively.

15 13. An air-conditioning system for vehicles according to claim 3,
wherein:

20 edges of said upper recessed member and said lower recessed member
constituting said blower / evaporator housing case include joint portions,
and a means for locking which locks an expansion valve is formed on said
joint portions.

25 14. An air-conditioning system for vehicles according to claim 13,
wherein:

25 said means for locking is constituted of semicircular notches for
clamping said coolant piping and guard members for covering said
expansion valve.

15. An air-conditioning system for vehicles according to claim 14,
wherein:

5 said guard members provided at said upper recessed member and said
lower recessed member include projecting pieces formed to support from
behind a screw hole metal plate for mounting said expansion valve at said
coolant piping with screws, respectively.

10 16. An air-conditioning system for vehicles according to claim 4,
wherein:

15 edges of said upper recessed member and said lower recessed member
constituting said blower / evaporator housing case include joint portions,
and a means for locking which locks an expansion valve is formed on said
joint portions.

17. An air-conditioning system for vehicles according to claim 16,
wherein:

20 said means for locking is constituted of semicircular notches for
clamping said coolant piping and guard members for covering said
expansion valve.

18. An air-conditioning system for vehicles according to claim 17,
wherein:

25 said guard members provided at said upper recessed member and said
lower recessed member include projecting pieces formed to support from

behind a screw hole metal plate for mounting said expansion valve at said coolant piping with screws, respectively.

19. An air-conditioning system for vehicles according to claim 15,
5 wherein:

said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.

10 20. An air-conditioning system for vehicles according to claim 18,
wherein:

said lower recessed member constituting said scroll unit and said evaporator housing unit is connected to an engine compartment partitioning wall via a bridge portion provided thereof.